

REMARKS

Favorable consideration and allowance of the application are respectfully requested. Claims 1-10 were in this application, claim 1 has been amended, and new claim 11 has been added. Claims 6-10 were previously withdrawn in response to a restriction requirement. Claim 6 has been amended to more closely conform to the limitations of claim 1, for possible return to the application by rejoinder.

Claim 1 has been amended to correct an error in the previous amendment, as the phrase "to form transversal zones of glue (19) delimited by side portions (19A, 19B) crosswise and regularly spaced apart onto the band" was added in the wrong location. Also, claim 6 has been amended to further clarify that the cutting is accomplished while the side edges are being pressed, to avoid wrinkling of the thin flexible film during cutting.

New claim 11 is another independent claim which further defines the elements involved in the pressing and cutting, in particular, the presser feet, carried by the rotatable roller and the cutting blade also carried by the rotatable roller, as described and shown in the application and drawings.

Claim 1 was rejected as the phrase "to form transversal zones of glue (19) delimited by side portions (19A, 19B) crosswise and regularly spaced apart onto the band" was not properly located in the previous amendment. It is believed that the phrase is clear, now that it is placed in conjunction with the limitation related to placement of the zones of glue 19. Consequently, the rejection is believed to be moot.

Claims 1-5 were rejected under 35 USC 103(a) as being obvious over Ballestrazzi, EP 526944 A1 ("EP '944").

In conducting an obviousness analysis, "[a] fact finder should be

aware . . . of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning." KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 1742, 167 L. Ed. 2d 705 (2007). This is because the genius of invention is often a combination of known elements that in hindsight seems preordained. In re Omeprazole Patent Litig., No. MDL 1291, 490 F. Supp. 2d 381, 2007 U.S. Dist. LEXIS 39670, at 400-01 (S.D.N.Y. May 31, 2007) (citation omitted) (quoting KSR, 127 S.Ct. at 1742); see also Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1138 (Fed. Cir. 1985), Raytheon Co. v. Roper Corp., 724 F.2d 951, 961 (Fed. Cir. 1983) (stating that "virtually every claimed invention is a combination of old elements").

The Court in KSR also wrote, "[r]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 1741, 167 L. Ed. 2d 705 (2007) ("To facilitate review, this analysis should be made explicit.") (citing Kahn, 441 F.3d at 988... "there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006).

If the prior art teaches away from combining known elements in the manner claimed by the invention at issue, discovering a successful way to

combine them is less likely to be obvious. See KSR Int'l, 127 S. Ct. at 1740, 1745.

Amended claim 1 is not believed to be obvious over EP' 944.

Before reviewing EP' 944, the examiner alleged that "such step of pressing over adhesive lines is old and well known in the art and could simply be done by hand as after adding glue to anything such pressing step over the glued portion is inherent via using human hands to firm the glued portion."

While possible true relative to hand applied glue, the statement has little relevance to the claimed invention, as the claim requires more than pressing, but also cutting an area between the pressed portions while the pressing is maintained, so as to separate the packages without wrinkling the thin flexible film.

While the examiner took official notice that such thin, flexible film is known, the examiner should also recognize that the properties of such a thin flexible plastic film are quite different from other packaging materials such as paper based products, and while Ballestrani uses the term "and the like" relative to "packaging paper", one skilled in the art would be quite familiar with the significant differences between such materials and not consider that a method useful for "packaging paper" could necessarily or predictably be used with such thin, flexible plastic films...consider the differences in using

ordinary plastic wrap as opposed to, for example, wax paper or even aluminium foil. These are not "like" materials, though they can be used to perform a wrapping function.

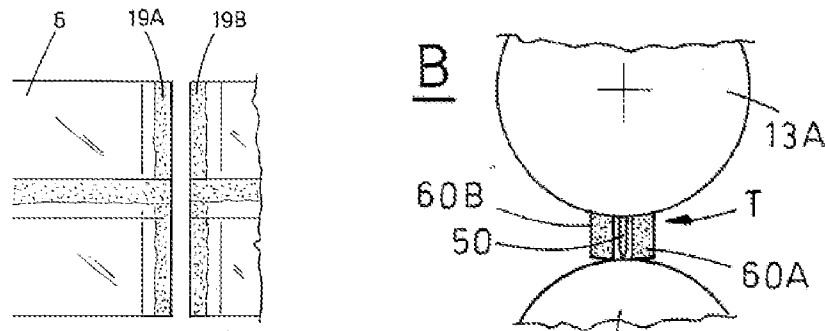
This makes a difference as the invention is directed to a particular type of material, a band of plastic film, which can be used to wrap and package articles, that is very thin, flexible and pliable. The properties of this material create the potential that after folding the band of plastic film, the overlapped portions of the band may not be perfectly in adherence with each other and some wrinkles could be present. Wrinkles can seriously affect the bonding action of the glue, precluding obtaining a stable joint.

While it may be known to apply a pressing action over the overlapped edges of the band in order to avoid the presence of wrinkles during folding and bonding, the applicant has noted that wrinkling can occur during cutting of the transversal zones of glue, as a blade passes over the band of plastic film.

Wrinkles formed during cutting can also seriously affect the bonding action of the glue in the transversal zones of the band.

The applicant has found that, as reported in the description and shown in figures 1B and 3, a specific combined pressing-cutting step can be performed by *"pressing the side portions (19A, 19B) of the transversal zones of glue (19) for stabilizing the crosswise joining of the side portions (19A,*

19B) and, at the same time, crosswise cutting said band of plastic film (6) between the pressed side portions (19A, 19B) of the transversal zones of glue (19), in order to obtain single packages of articles”.



In particular, at page 7, lines 28-29, it is stated that “Cutting means 12 are situated downstream of the rotary belt 11” and at page 8 lines 5-14 that “In the present case, the cutting means 12 include a pair of counter-rotating rollers 13A, 13B, respectively upper and lower, with a suitable cutting members T provided on their peripheral surface. The cutting member T include a blade 50, carried radially by the upper wheel 13A and situated between two presser elements 60A, 60B, aimed at pressing two side by side crosswise portions 19A, 19B in the zone 19. The portions 19A, 19B will be separated upon cutting the zone 19 by the blade 50”.

At page 9, lines 11-22 it also stated that “The band of plastic film 6, wrapped in tubular form around the articles 2 reaches the counter-rotating rollers 13A, 13B of the cutting means 12, which stabilize, due to the action of the small pressers 60A, 60B, the joining of the portions with the transversal

zone of glue 19, and cut the band 6 crosswise, by the cutting member T. It is to be noted that the band of plastic film 6 is cut crosswise by the blade 50 along the portions joined by the transversal zones of glue 10, and more precisely, in the middle of the zones 19, that is between the portions 19A, 19B.”

The provision of two presser elements (60A, 60B) and of the cutting blade (50) disposed therebetween has the effect that the side portions (19A, 19B) of the transversal zones of glue, which are to be separated, and which will form the side edges of the finished packages, are maintained pressed by the two presser elements (19, 19B) as the cutting blade cuts the band in the middle of the zone (19).

Ballestrazzi is silent about the possibility of performing, at the same time and contemporaneously, a pressing-cutting action over the transversal zones of glue of the paper material after the band of the paper material has been folded over the articles.

In fact, Ballestrazzi only describes crosswise cutting of the paper band using a transverse blade (21), and is silent about the possibility to perform, at the same time and contemporaneously, a pressing action over the side portions of the transversal zones of glue.

At column 2, lines 40-47, it is stated that “*Downstream of the sealing apparatus according to the invention there is provided a transverse cutting*

element shown schematically at 21, for example comprising a transverse blade which by moving vertically with reciprocating motion separates the individual packages defined by the adhesive material, these being finished and perfectly sealed".

Thus, in Ballestrazzi there is no disclosure concerning executing a pressing action over the side portions of the transversal zones of glue and at the same time maintaining the pressing action, so as to complete a crosswise cutting action over a specific area of the band of film situated between the pressed side portions.

Ballestrazzi does not utilize such a combination step, and the fact that this is not done nor deemed necessary would lead one away from the claimed invention. Consequently, claims 1-5 are not obvious in view of Ballestrazzi.

Claims 1-5 were alternatively rejected as being obvious over the combination of Ballestrazzi in view of Nack, U.S. Patent no. 4,102,111.

The discussion relative to Ballestrazzi above is equally applicable to this rejection, and is incorporated here.

The Examiner admitted that Ballestrazzi fails to disclose the step of pressing the overlapped transversal zone, and cites Nack as disclosing the "pressing the transversal glued overlapped portion (Fig. 7, via jaws 56 and 58)."

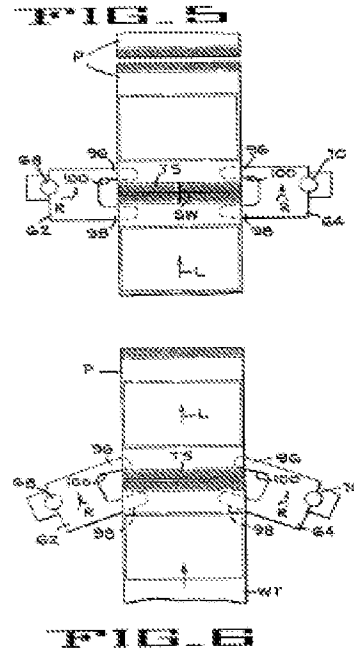
Nack (US 4.102.111) discloses a wrapping machine in which a continuously moving web strip is formed into a tube of thermoplastic material, into which a file of longitudinally spaced articles are inserted.

Nack describes tucking devices, cooperating with a separate cutting mechanism, creating folds at the ends of the packages. The tucking devices are best seen in figures 5 and 6.

The elements "96, 98" are the fingers of two tucking devices (62, 64) which are synchronously rotated so that the opposed side portions of a web tube are engaged at substantially the same moment as engagement is made by jaws 56 and 58 (col. 4, l.11-15). The tuckers (62, 64) are preferably made of a flat plate which is formed to provide laterally spaced projecting fingers (96) and (98) (col. 4, l. 40-42).

The minimum spacing between the fingers is slightly greater than the width (SW) of the seal pattern and it will be seen that it extends for the entire lateral dimension of the web tube (WT).

With reference to figure 5 it will be observed that when the tuckers (62, 64) have reached the limit of their inward travel the pairs of tucking



fingers (96, 98) straddle or are on either side of the transverse seal (TS) and are contiguous and partially coextensive with the seal (TS). (col. 4, l. 43-51).

The web tube moves at a constant rate in the direction of the arrows L and the tucking fingers are rotated in the direction of the arrow R at an angular velocity such that the top speed of the fingers (96, 98) match or substantially match the velocity of the web tube. The tucking fingers (as shown in figure 6) assume the relative position after tucking, sealing and severing has occurred (col. 4, l. 54-61).

Nack states that the fingers have to be made as long as possible and that the lateral spacing therebetween should be equal to or substantially equal to the width of the seal, as retraction or removal of the tucking fingers would disturb and possibly destroy the integrity of the seal. (col. 4, l. 62-67).

It is therefore necessary to limit the inward travel of the tucking fingers (96, 98) to space them apart a distance greater than the width of the seal pattern (i.e. beyond the area of bonding, as illustrated in Figs. 6 and 7), so that as the tucking fingers are withdrawn, interference with the seal is prevented or minimized.

According to Nack, the tucking fingers (96, 98) of the respective tuckers (62) and (64) are formed with a trailing edge (100) which is undercut or tapered to minimize or prevent interference with the seals. (col. 4, l. 67-col. 5, l. 8).

Nack consequently leads completely away from the present invention which provides a pressing action over the side portions of the transversal zones of glue (19) and a concurrent cutting action of a specific band area located between the pressed side portions.

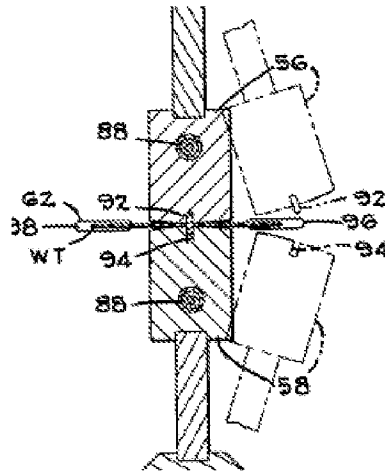
The tucking fingers of Nack do not "act" over the side portions of the transversal zones of glue to press them, but rather act on the opposite lateral edge sides of the web tube, in order to tuck inwardly the side portions of the web tube to define creases (see col. 1, l. 41-51).

Nack explicitly constructs the tucking fingers to avoid any interference with the side portions of the seals, and so the fingers do not press these side portions, nor could they hold the side portions during cutting.

Moreover, in Nack, a transversal severing of the band is completed by a piercing knife (92) which penetrates through the band in a region which is not maintained under pressure by any presser elements pressing over the side portions of the transversal zones of glue.

The jaws (56, 58) cited by examiner do no act over the side portions of the transversal zones of glue in order to execute a pressing action over the side portions. This is evident from figure 7.

The upper jaw (56) has a radially extending knife (92) for chopping into the band. On both sides of this knife, no presser elements are provided. As the jaws (56, 58) pass from the configuration shown in dotted line to the configuration in which the upper jaw (56) is in vertical alignment with the lower jaw (58), the knife



(92) pierces the band but no means are provided for performing a concurrent pressing action over the side portions. In fact, the angular rotation of this knife shows that the extending knife pierces the band well before the jaws reach the true vertical orientation, and so it would be impossible to apply pressure to both sides adjacent the cut, during the cutting action.

Consequently, in Nack it is clear that the side portions of the transversal zone of glues are not and cannot be maintained with pressure while the cutting action is performed, and following Nack would still leave the problem of the formation of wrinkles during cutting.

A skilled person would not find in Nack any suggestion for applying a pressing-cutting action that could be applied in Ballestrazzi, to arrive at the applicants' invention, and even if the combination were made, there is no method for applying a pressing action over both side portions of the

transversal zones of glue during cutting. The combination would lead one away from, not towards the present invention.

Consequently, the subject matter of method claim 1 would not be obvious to one skilled in the art, having each of Ballestrazzi and Nack before him, and amended claim 1 and the claims depending therefrom are not rendered obvious by Ballestrazzi in view of Nack.

New claim 11 which adds limitations as to the elements used to perform the method as described in the application, is similarly believed to be allowable over the cited art.

Should claim 1 be considered in condition for allowance, rejoinder of claims 6-10 is respectfully requested, as claim 6 has been amended to substantially track the limitations of amended claim 1.

Based on the above amendment and remarks, reconsideration and removal of the grounds for rejection are respectfully requested. However should the examiner believe that direct contact with the applicant's attorney would advance the prosecution of the application, the examiner is invited to telephone the undersigned at the number given below.

Respectfully submitted,
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